

## Abstract

With an amplifier configured by including Doherty-type amplifier sections 21 to 25, the area of the circuits is reduced so that the size reduction is achieved. Moreover, the properties of the Doherty-type amplifier sections (Doherty properties) are stabilized against any environmental change of humidity and temperature. As an example, the permittivity of a substrate 3 configuring one or more of quarter wavelength lines 23 and/or 24 included in the Doherty-type amplifier sections 21 to 25 is increased compared with the permittivity of a substrate 2 in a close range. As another example, a line portion forming an output circuit of a carrier amplifier in the Doherty-type amplifier sections is configured by using a substrate material being physically stable against either or both of any change observed in the humidity and the temperature.